

ABSTRACT OF THE DISCLOSURE

A tyre for a vehicle wheel includes a toroidal carcass, a tread band, and a belt structure. The carcass includes a central crown portion and two axially opposite sidewalls. The axially opposite sidewalls end in a pair of beads for mounting the tyre on a corresponding rim. Each bead includes at least one annular reinforcing core. The tread band is disposed at the central crown portion of the carcass, coaxially extends about the carcass, and includes a relief pattern for rolling contact with the ground. The belt structure is coaxially interposed between the carcass and the tread band. The carcass further includes at least one carcass ply. Ends of the at least one carcass ply are anchored to the annular reinforcing cores. The at least one carcass ply includes a portion that encloses at least one insert in proximity to the annular reinforcing cores.